

THE GREEN CALDRON

A MAGAZINE OF FRESHMAN WRITING



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Vol. 25, No. 3

March, 1956

UNIVERSITY OF ILLINOIS

THE GREEN CALDRON is published four times a year by the Rhetoric Staff at the University of Illinois. Material is chosen from themes and examinations written by freshmen in the University. Permission to publish is obtained for all full themes, including those published anonymously. Parts of themes, however, are published at the discretion of the committee in charge.

The themes selected by the committee are judged on their merit as good freshmen writing. The views expressed are those of the authors, and are not to be construed as a reflection of the Rhetoric Staff's opinions.

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Five-Cent Heroine: 1923

ELIZABETH CIOBAN

Rhetoric 102, Assignment 21

PIERRE SAT WITH THE WOODEN CHAIR TILTED ON TWO legs, its back leaning against the plastered chimney which projected into the kitchen. Directly before him stood his sisters, Yvonne, seven, and Bette, five, their grey eyes watching the high school textbook he held thrust forward.

"Between the pages of this book," the youth announced pontifically, "I have placed a valuable object. I will present it as a reward to the one of you who can stand a beating without yelling. Now don't push," he protested, as the girls edged closer. "I will permit you to see this object in the book only. You cannot handle the book and I won't open it."

Yvonne and Bette tried, alternately, to peer down into the dark fissure between the pages of the blue textbook. "It's a nickel, I think," Yvonne declared. "It's shiny and it's too big for a dime and you wouldn't give away a quarter. Is it a nickel, Pierre?"

"It may be a nickel, indeed. I freely admit it is a round and a shiny thing. Yes, it may well be a coin; it is entirely possible that it is a nickel."

He brought the tilted chair down hard on the rough wooden floor and stood up. Pushing the chair aside, he ceremoniously laid the book upon it and began removing the thick leather belt from his Lone Scout Uniform. "You first, Bette," he bade the chubby redhead. "Stand with your face against the chimney."

The first tentative flick of the belt set Bette to screaming energetically. "I knew you'd cry right away, bawl baby," jeered Yvonne as she took her place against the chimney. "You always cry over nothing. But I won't cry."

Yvonne stood erect, her slender body taut and unyielding beneath the limp folds of her dark woolen dress. She set her feet, in calf length black-and-brown laced shoes, precisely parallel and held her black-stockinged legs firmly together. Her arms were stiff and straight at her sides, and her hands were firmly clenched into fists.

Pierre delivered the first three lashes gently but added strength to the next three. "Give up?" he asked.

Yvonne shook her head.

Stirring her straight dark hair and beating dust motes from her clothing, the stinging belt travelled from Yvonne's shoulders to her ankles in a succession of quick, sharp blows. "Will you surrender now, you juvenile Joan of Arc?" Pierre asked. "Do you want to give up?"

Yvonne shook her head vehemently. "I won't ever give up, not even if you beat me to pieces. I want that nickel."

Pierre hesitated; he wanted to stop but he did not know how. Thinking that Yvonne must surely cry out soon, he decided to continue. "Yvonne," he threatened, "give up now because if you don't I'm going to hit you as hard as I can."

"I don't care. I want that nickel."

The boy applied himself seriously to the task of beating his sister. Striking her thin back and bony shoulders, the forceful blows rocked her body. Yvonne righted herself, clenched her hands tighter, and stood straight again, quivering, but prepared for more.

"There's the book, Yvonne," said Pierre, indicating the volume on the chair. "You are very brave. You have certainly and undoubtedly earned your reward." He walked quickly out of the house, slamming the door.

Yvonne's face, still grim and determined, began to relax; a triumphant smile hovered on the edges of her mouth as she picked up the book. Its open pages revealed a silvery button. The outraged child shrieked.

It Ain't Either

JACK COOPER

Rhetoric 101, Theme 3

EXCEPT FOR A FOUR-YEAR'S RUNNING BATTLE WITH THE Air Force, all my life has been spent in Champaign County. It was inevitable that I come in contact with many people, customs and traditions associated with the University of Illinois.

One of these "traditions" was the *Green Caldron*, a freshman publication that I had often heard of but had never seen. I was quite elated when its content was assigned for the next class meeting. Here at last was my opportunity to own this exclusive collection of literature. With this happy thought in mind, I entered a campus book store.

A large and noisy group of students was gathered about a large table in the center of the store where four salesgirls were busy selling red pamphlets. I started to look around for the *Green Caldron*. On the third trip around the store I got the uneasy feeling that something was amiss. Somewhat self-consciously I approached a smiling salesgirl at the center table and asked for a *Green Caldron*. She smiled disarmingly and said, "That will be twenty-five cents, please." I dutifully handed her the quarter I had clutched in my hand. She smiled again, and deposited my "two-bits" in the cash register. Somehow, I felt cheated; I still hadn't received my magazine. As I stood there open-mouthed, she turned to me and said, "Oh, I'm sorry, did you want a bag?"

"Bag?" I whispered, "Bag for what?"

"Why, for your *Green Caldron*," she said.

Controlling myself, I informed her that I had not yet received my *Green Caldron*. With a disgusted sigh she indicated the stack of red pamphlets in front of her. Seeing that I still didn't comprehend, she thrust one into my hand, saying, "This is it."

I stared at her in disbelief, then glanced at the pamphlet. The words on it seemed to leap out at me—GREEN CALDRON.

I was a broken man. My whole naive little world had collapsed around me. As I walked dejectedly from the store I barely heard the titters and remarks from the other customers who had witnessed my embarrassment.

My only wish for the moment was that whoever was responsible for the *Green Caldron's* having a red cover would spill red ink all over his white bucks.

How to Fight Liberalism

ROGER SHEAHEN

Rhetoric 101, Final Examination

IT HAS BEEN BUT A FEW SHORT YEARS SINCE THE DAYS of the cover-all swim suits, but with the birth of the no-chaperone dates and Freud's theories on the relationship between sex drives and the behavior of man, the concepts of sex and morality in American have grown and "liberalized" to the point of being insidious. The writer of this paper does not intend to advocate a return to the horse-and-buggy days, but merely to illustrate a current trend in thinking called "liberalism," and to advance his theories and arguments on this subject.

First of all, let us define "liberalism." Liberalism is a broad term, carrying with it many unseen connotations. However, liberalism with respect to sex and immorality is, at the present time, generally accepted to have this definition. It is an "open-minded" viewpoint on sexual behavior and immoral conduct. Each man has free will; therefore, let him decide for himself what is right. Sex exists; therefore, why try to hide it behind the censorship of a handful of "narrow-minded" people? Rape, adultery, and prostitution occur; therefore, why outlaw them? Rather, make prostitution legal and, thereby, safe. In this way, the tendency towards rape will be reduced and society will not be harmed by "social diseases." Pre-marital intercourse occurs, usually without any physical violence; therefore, do not punish it. This is an all-inclusive definition of liberalism—a conglomeration of the basic philosophies of all liberals with whom the writer has come in contact. The phil-

osophy of any individual liberalist does not necessarily contain all concepts mentioned. Some advocates of liberalism do not include rape in the above definition, but, on the other hand, some do. Therefore, the word rape is included in the definition.

The reader may very well be shocked by the fact that this liberalism is being advocated today by a great number of people. However, the concept does exist and it must be coped with, not disregarded as liberalists are wont to do with existing problems of immorality. The reader surely recognizes the consequences in a culture based upon this concept, simply by imagining the social chaos inherent in the definition. The two basic principles of American society, monogamy and the family unit, would become meaningless. Society would crumble. The problem now arises: how do we who want a moral society combat the liberalist?

The answer to the problem lies in the original definition of liberalism, the basic philosophy of the liberalist. If one can show the liberalist the fallacies upon which the philosophy of liberalism is based, half the battle is won.

In the first place, the liberalist leaves himself wide open to the argument when he includes the word "immoral" in his philosophy. By the use of this word, he admits that there is behavior which is not good. Then he immediately contradicts himself by stating that that which is immoral—not good—should be looked upon with an "open mind." In other words, "It's not so bad." By pointing out this fact, one can immediately confuse the liberalist and make him start thinking of arguments to back up the rest of his philosophy.

Next, the liberalist mentions "free-will." But, by delegating to man (who he readily admits is imperfect) the power to decide what is right and what is wrong, he shows his willingness to attribute the quality of perfection to an imperfect being—a fallacy in itself. In addition, because man is likely to change his concept of right or wrong, depending entirely upon circumstance or convenience, what is right one minute may be wrong the next. Thus, right becomes wrong and vice-versa—another fallacy. The liberalist has ignored permanence, the determining quality of morality. He has ignored God.

Then he (the liberalist) proceeds to speak of censorship as a power belonging to a "handful" of people and, therefore, an infringement upon our basic right of freedom. If one casually mentions that this "handful" is a body established by a free people for a special purpose, the original argument has already collapsed. Also one could argue that sex is not being "hidden" simply because it is censored on movie screens and in magazines. There are available to the general public many medical books which are quite adequately informative.

The last three concepts of the liberalist could all be combined under the one heading, "free love." The main object of this, of course, is to save the liberalist from punishment if he should violate one of the now existing laws of society. However, one of the best arguments to present in this case is the

counter proposition: bank robberies occur, usually without physical violence; therefore, do not punish the felons; or murder exists; therefore, why outlaw it? and so on.

By this time the liberalist is completely ensnared in the meshes of his own fallacies and is struggling to extricate himself gracefully without backing down on the concepts of his philosophy. But it cannot be done. The liberalist has denied the existence of God and his laws. Both are basic factors in our society. All liberalists with their illogical concepts will one day have to entangle themselves and admit that: "The two billion intricate laws of society are merely explanations of ten simple Commandments."

My Favorite "Badge of Courage"

JOSEPH SWINARSKI

Rhetoric 101, Theme 5

AS LONG AS THE ENGLISH TONGUE SURVIVES, THE WORD *Dunkerque* will be spoken with reverence. For on that beach and in that harbor hell blazed on earth as never before at the end of a lost battle; the rags and blemishes that had hidden the soul of democracy fell away.

It was a small battlefield which was sculptured by the lunatic hewing of cannon and mortars. Shells painted it with the whites and yellows and reds of shredded men. The sands were wet as blood and blackened like wounds, and only the smoke and deafening echoes of fury were left. Now the whole battlefield seemed like a painting that moved slowly and silently across its canvas, and then slowly and silently into the mind, where it painted the mind.

Men died so others could escape. It was not so simple a thing as the courage which can be hammered into men on a drill field. It was not the result of careful planning, for there could have been very little. It was merely the common man of free countries rising in all his glory out of the office, factory, mine, farm and ship; applying to war the lesson he learned when he hurled the lifeboat into the surf, when he went down the mine shaft to bring out trapped comrades, when he endured poverty and hard work for his children's sake.

How bitterly small an inch of sandy beach seems. How bitterly small it seems to some of us who never saw men die for it. Was it too much to expect? On this cemetery-beach there is a silence all around, a body of silence, like something living there. There is no voice of life in the cemetery of civilians; whereas, in a soldier's cemetery the voice is very loud. How bitterly small Dunkerque is, but how colossal the price was.

Point Counter Point

LYNDEN HARBAUGH

Rhetoric 101, Theme 10

IN *POINT COUNTER POINT*, ALDOUS HUXLEY PRESENTS A penetrating study of people—people of many types and temperaments, people who have principles, and people who have none. In the novel, Huxley states: "Everything that happens is intrinsically like the man it happens to." Huxley then proceeds to develop, in the life of each character, events which correspond to his individual personality.

Marjorie Carling, coolly refined, cultured, and virtuous, is in love with love—the pure love about which the poets sing. To her, "love was talk, love was spiritual communion and companionship. That was real love." It is then not surprising that in the last picture which we are given of Marjorie, she is looking at the world as if through an inverted telescope. Walter and the world are no longer significant. She has at last found, in her love for God, the unadulterated love for which she had been searching. She is last shown, sitting, staring out of the window into complete darkness, and "through the vacant lifelessness of trance her spirit sank slowly down once more into God, into the perfect absolute, into limitless and everlasting nothing."

Walter Bidlake, who admires Marjorie's goodness and purity from a distance, is bored and exasperated by her coldness close at hand, for "under the shy, diffident, sensitive skin of him, he is ardently alive." But, unfortunately for him, Walter is the type of person who fairly invites maltreatment. He is by nature gentle and conscientious. His anger at Marjorie could not put down the feeling of shame, and his savage and obstinate desire for Lucy was tempered by adoring and passionate tenderness. "It was as though a protection had been stripped from him and he were left here, in the quivering, vulnerable nakedness of adoring love." Of the vulnerability, Lucy seems to take every advantage. "She would let herself go a little way toward surrender, would suffer herself to be charged by his caresses with some of his tenderness only to suddenly draw herself back from him into a teasing, provocative detachment. And Walter would be awakened from his dream of love into a reality of what Lucy called "fun," into the cold daylight of sharply conscious, laughingly deliberate sensuality. She left him unjustified, his guiltiness unpalliated."

Walter—sensitive and vulnerable Walter, who was born to be treated badly—is eventually deserted by Lucy. It seems necessary that Walter should last be seen in complete anguish, an anguish which is pain, anger, disappointment, shame, and misery all in one. "Upstairs in his room, Walter was lying on the bed, his face buried in the pillows."

Lucy Tantamount, the reason behind Walter's desire and misery, is a wealthy and willful girl, and is thoroughly convinced that the world revolves

only to make her happy. "She's one of those women who have the temperament of a man. Men can get pleasure out of casual encounters. Most women can't; they've got to be in love, more or less. They've got to be emotionally involved. All but a few of them. Lucy's one of the few. She has the masculine detachment. She can separate her appetite from the rest of her soul." She became Walter's mistress merely because he amused her, and she was bored; but, even when she gave him her body, she refused to give him her love.

Because Lucy never allowed her heart to become involved in her affairs, they were as easily dropped as they were taken up. Is it not intrinsically like Lucy to be last mentioned having another fling? This time it takes place in Paris, and with a beautiful brown savage, but she is still emotionally detached and free—still beautiful, but still bored.

Analysis As Well As Alka-Seltzer

JACK H. CUTLER

Rhetoric 101, Theme 5

TWENTY-THREE CENTURIES AGO, DURING THE THIRD Century B. C., Aristotle penned the first critical analysis—a treatise on poetry. Since this highly respectable origin, the value of such analysis has been a subject of great controversy. The claims and counter-claims for the relative usefulness of this process have flown thick and fast. The proponents of critical analysis contend that to read and not to analyze is not to read at all and its opponents stoutly declare that this process of "tearing apart and scrutinizing" lessens the reader's appreciation of literature. These biased evaluations, which are usually stated as self-evident truths requiring no supporting material, furnish little or nothing for the intelligent person to base a just decision upon. The logical mind is still unconvinced of the essentiality or superfluity of critical analysis.

The main fallacy in the appraisals of the literary radicals is their approach to the subject matter. They attempt to determine the worth of critical analysis as if it were a horse, whereas the true critic does not evaluate the process as a whole but appraises its component parts individually or in small groups. And only with this fact in mind is an accurate evaluation possible.

In a consideration of prose only, the first steps of a critical analysis—categorizing the writing as fiction or non-fiction and identifying the class to which it belongs (novel, essay, short story, exposition, etc.)—may appear to be mere mental calisthenics. But, in reality, this phase of the analysis possesses an extremely important function. Through distinguishing fact from fantasy and restricting the prose in question to a certain type, these basic steps greatly aid the reader in the execution of the next two (and principal)

procedures: defining the purpose and determining the meaning of a literary prose work.

These interpretative measures, unlike the categorical and classification steps, often require deep concentration and strenuous mental effort on the part of the reader. Admittedly, in some prose selections such as Dean Prosser's essay "English As She Is Wrote," the purpose and meaning of the writing are as obvious as the color of Santa Claus's suit. But in the majority of such literature reason and reflection are necessary for a true interpretation of the author's ideas. One simply does not unearth the profound meaning of a story such as Hawthorne's "The Minister's Black Veil" without some mental exertion. However, the effort spent returns big dividends. These steps in critical analysis enable a person not merely to read, but to read with understanding; and through "reading with understanding" any literate man, woman, or child has access to an ocean-like reservoir of ideas, ideals, opinions, theories, meditations, reflections, speculations, observations, and sentiments of the past and present.

Critical analysis, through this stage, is as essential for the digestion of food for our minds as our salivary glands are for the digestion of our body-food. And, whereas large servings of body-food tend to make us broader, large servings of mind-food tend to make us broader-minded.

Unfortunately, however, nothing is so useful that it cannot be overworked. And critical analysis is no exception. Many thoroughly "rhetorized" individuals are not content with extracting merely the meaning and purpose from a novel or essay. They also analyze the diction, tone, literary devices, and many other aspects too numerous to mention. But this thirsting-for-knowledge caste oftentimes misses the author's meaning by studying only the author's style. And these pseudo-intellectuals, confirmed believers in the old political slogan, "What's good for me is good for you," declare that *everyone* should study the stylistic qualities of *all* reading material. This assertion, eloquently stated, is typical of the radical evaluations of critical analysis. Undoubtedly, the critical analysis of the various writing styles and methods of development would prove invaluable to the future author or authoress. But these are exceptions rather than the rule. Such analysis would be practically worthless to the average American or, for that matter, the average citizen of any country. What possible benefit could a farmer or even a doctor reap from the knowledge that O'Henry specialized in surprise endings or that Wilbur Daniel Steele used "back-country" diction in "How Beautiful With Shoes" to gain special effects? Such knowledge would certainly not enrich one financially, could seldom be utilized as a conversational bit, and, contrary to the contention of the champions of style-analysis, it does not enhance *everyone's* appreciation of literature.

"For best results, avoid excessive use." This medicine chest maxim can be appropriately applied to critical analysis as well as to Alka-Seltzer.

History of Radar's Development Through World War II

HARRY W. RICHARDSON

Rhetoric 102, Theme 13

ALTHOUGH THE DEVELOPMENT OF RADAR AS A WEAPON of war goes back a little more than a decade, the general principles have been known and used for many years. As early as 1887, Heinrich Hertz, a German radio physicist, proved that radio waves could be reflected like light rays, and could be formed into beams by metallic mirrors similar in shape to the mirrors used to form beams of light. To Hertz goes the credit for discovery of two of radar's essentials. History, however, doesn't indicate that these principles were investigated to any length until 1922 when Dr. A. H. Taylor and Mr. L. C. Young of the Naval Research Laboratory detected interference patterns while working with high frequency radio waves near Washington, D. C. These two men, whose position in the development of radar is outstanding, noted that 60 megacycle radio transmissions across the Anacostia River were disturbed by the passage of boats on the river. These results were embodied in a suggestion to the Navy Department that destroyers located on line a number of miles apart could be immediately aware of the passage of any enemy vessels between any two destroyers of the line irrespective of fog, darkness or smoke screen. This observation antedates other radar work by a number of years.¹

Meanwhile the Army experimented along other lines in an attempt to improve its antiaircraft activities. The Ordnance Department had been working intermittently since 1918 on various sorts of heat and infrared detectors of aircraft until the Army transferred responsibilities for aircraft detection to the Signal Corps laboratories. Up to this time (1930) both the Navy and Signal Corps had been trying a method of continuous wave radio transmission to obtain useful detection data from ships and aircraft, but this method demanded the generation of sufficient power to obtain any echoes.²

The Carnegie Institution of Washington began a series of successful experiments in 1925 which led the way to more efficient use of radio waves for ionosphere investigation. The pulse range method was tried for the first time and the results indicated that this new technique would become the standard method for ionosphere measurements. The technique consisted of send-

¹ Donald G. Fink, *Radar Engineering* (New York: McGraw-Hill Book Co., 1947), pp. 5-6.

² U. S. Joint Board on Scientific Information Policy, *Radar, A Report on Science at War* (Washington, 1945), p. 5.

ing skyward a series of very short pulses, a small fraction of a second in length, and measuring the time it took the reflected pulse to return to earth. Dr. Taylor and Mr. Young of the Naval Research Laboratory had set up this experiment for the Carnegie Institute and so brought back this new idea to the Navy in 1930. Experiments using this new idea for ship and aircraft detection began again with new vigor.³

Curiously, nature has provided bats with this same pulse ranging system to aid these mammals in their nocturnal flights. The Cruft Laboratory of Harvard University showed that bats emit sharp pulses of supersonic acoustic energy at a rate of fifty pulses per second. The bat is thus able to detect and time these returned echoes so that it can soar through darkened caverns without touching overhanging stalactites and low ceilings.⁴

Until the new idea of pulse ranging was perfected, the Army and Navy were actually using a World War I method of detecting aircraft by sound locators. This method consisted of an elaborate array of listening horns mounted to revolve in any direction and pointed upwards to pick up the sound of an aircraft's exhaust or propeller pitch. During World War I this method might have sufficed for defense, but aircraft's speed was increasing steadily. With this outmoded method, the sound from a plane at a distance of thirteen miles would take a whole minute to reach the horn of the detecting set. If this plane were traveling at a slow speed of 120 miles per hour, or two miles a minute, it would be two miles away from the original spot when it was picked up by the sound locator.⁵ It was realized that any increase in speed of aircraft would only make the situation worse. Something more rapid was necessary to give the anti-aircraft units needed warning. Radar was the answer, for it solved the problem in one stroke. Radio waves traveling at a speed of 186,000 miles per second were roughly 892,800 times faster than the speed of sound and several million times faster than the speed of aircraft. Radar would indicate the plane's position immediately and yet radar would not be appreciably obstructed by any fog, clouds or precipitation.⁶

Radar was born when it occurred to different persons independently and in different parts of the world that the pulse technique could be used to detect objects like aircraft and ships just as well as it had detected the ionosphere. This idea seems to have occurred almost simultaneously in France, America, England, Germany and probably Japan. Scientists in these countries worked secretly on the problems of increased power output, better directional antenna beams and shorter pulses.⁷ "The struggle for technical ascendancy between our scientific brains and those of the enemy became intensified as the un-

³ *Ibid.*

⁴ "Study of Bats," *Scientific Monthly*, LVI (February 1943), pp. 158-9.

⁵ John F. Rider, *Radar, What Is It?* (New York: John F. Rider Publisher, Inc., 1946), p. 35.

⁶ Fink, p. 4.

⁷ U. S. Joint Board, p. 5.

dreamed-of-possibilities of centimeter wavelength radar were gradually unfolded. It had indeed the character of a secret battle fought out in the laboratories of the Allies and Germany."⁸

During the years of 1936 and 1937 both the Army and Navy had designed and developed their own radar sets. Due to the foresight of the Secretary of War and because of his suggestion, the Army and Navy freely exchanged information on their independent researches and thus expedited the final products. The Navy's set had been installed on the *U. S. S. New York* and was given exhaustive tests during sea maneuvers in early 1939. The set's performance was gratifying and contracts for six sets were awarded to a commercial company in November, 1939. The Army's set also proved successful during exhaustive tests at the Coast Artillery post, Fort Monroe, Virginia, in November, 1938. During these tests, in addition to locating planes for the anti-aircraft crews, radar showed new possibilities. The set detected anti-aircraft shells in flight, and also guided back to a safe landing an army bomber which had been blown out to sea on its test mission as a radar target. Eighteen sets were built in 1940 by the Signal Corps laboratories in order to get equipment into the hands of troops for training purposes, while quantity production by commercial contractors was getting under way.⁹

Meanwhile British radar was developed at about the same time but at a much faster pace under the immediate threat to Britain's security. The British had investigated the same method as used in the ionosphere measurements by Dr. Taylor and Mr. Young for the Carnegie Institute and were able to complete their first set in the spring of 1935. During 1936 five more sets were built and installed twenty-five miles apart to protect the entrances to the Thames estuary. When Prime Minister Neville Chamberlain went to Munich in September, 1938, these five stations were put on a twenty-four hour watch for the first time. When the Germans occupied Prague in November, 1938, round-the-clock operations began for these stations and continued until the end of World War II. These five stations became the nucleus of the great chain which finally encircled the British Isles. The British development of radar during this period was well in advance of other countries, including the United States, and remained so until the pooling of American and British interests in 1940.¹⁰

An important step took place in the United States in unifying research and development activities on radar and in breaking ground for entirely new techniques when President Roosevelt issued the executive order establishing the National Defense Research Committee on June 27, 1940. The Army and Navy were thus able to turn over to scientists mobilized by this committee a large number of problems which would involve considerable research and

⁸ George S. Godwin, *Marconi, 1939-1945, A War Record* (London: Chatto & Windus, 1946), p. 100.

⁹ U. S. Joint Board, p. 6.

¹⁰ Fink, p. 8.

time. One of the first steps taken by this committee was a preliminary breakdown of the fields of activity into four categories dealing with ordnance, chemistry, communications, and physics. The physics group, headed by the eminent Dr. Karl T. Compton, eventually was responsible for the development of more than 100 different models of radar equipment used by all services of the Allies during World War II.¹¹

During November, 1940, an initial meeting of fifteen physicists from various universities and headed by Dr. Compton took place in a laboratory of the Massachusetts Institute of Technology. This group was the nucleus of the Microwave Committee of the National Defense Research Committee. The growth of this group and its accomplishments from the initial meeting until its dissolution at the end of the war with Japan were phenomenal. At the close of World War II the Radiation Laboratory, as the Microwave Group called itself, had a total of 3900 employees and covered an area of two-thirds of a million square feet of floor space in one permanent and two temporary buildings located on the campus of M. I. T. In addition, approximately 150 civilian employees in uniform were constantly in the field instructing Army and Navy personnel in the operation and maintenance of new equipment developed at Radiation Laboratory. Over a billion and a half dollars' worth of equipment, which had its inception at the Radiation Laboratory, had been produced, and another billion dollars' worth was on order when the war ended.¹²

One of the most important lifts to the new Microwave Group of NDRC and to the developments in the microwave field was provided by the visit of a technical mission from England in the fall of 1940. This mission, headed by Sir Henry Tizard, brought over a model of the new "cavity magnetron" which had been perfected by a research group at the University of Birmingham. This tube oscillated at a frequency of 3000 megacycles (10 centimeters) at a peak power of 10 kilowatts. The U. S. Army had attempted experiments as early as 1934 in this same frequency range but was unable to produce power of only one watt. The power capability of this new tube was unbelievable. "Small as the magnetron was in size, it has been called 'the most important piece of cargo ever to cross the Atlantic ocean.'" ¹³

Until 1941 the U. S. Army had been calling its locating equipment by the name "radio position finding." The British used the term "radiolocation." The Navy had coined the word "radar" as an abbreviation for RAdio Detection And Ranging; and this convenient term was soon adopted in the United States and subsequently, in 1943, was officially adopted by the British.¹⁴

¹¹ Keith Henney, *Index: Radiation Laboratory Series* (New York: McGraw-Hill Book Co., 1953), p. viii.

¹² Lee A. DuBridge, "History and Activities of the Radiation Laboratory of MIT," *Review of Scientific Instruments*, XVII (January, 1946) p. 2.

¹³ Henney, p. x.

¹⁴ U. S. Joint Board, p. 9.

The assaults on England by the German *Luftwaffe* began in August, 1940, as had been long expected, and rapidly increased in intensity. Despite a critical shortage of both aircraft and pilots, the British were able to spot each raid as it came across the Channel in time to send up their fighters against the raiders. This was possible because of British radar, and thus constant patrol by airborne fighter planes was eliminated.¹⁵ "In the fall of 1940, a handful of British fighters broke the back of the German aerial invasion because they had an innovation called radar."¹⁶

By the end of 1941, the United States had enough long-range radar search sets to insure installations at various strategic points such as Alaska, the Hawaiian Islands and the Philippines. Unfortunately, on December 7, 1941, human performance may have been wanting, but radar did its job by showing the presence of Japanese planes forty-five minutes before they struck Pearl Harbor, when they were still 135 miles away. Had this warning been heeded, the war might have taken quite a different turn.¹⁷

With the United States finally in the war against the Axis countries, the radar program expanded explosively, with practically all ceilings removed on the allotments for production and training. The Radiation Laboratory was perfecting a 3 centimeter magnetron designed after the British 10 centimeter model and this new wavelength indicated that previous problems of resolution, range and equipment portability would soon be solved.¹⁸

Personnel of the 8th Air Force worked alongside the British and prepared for their part in the eventual invasion of the continent. Anti-aircraft batteries kept in practice by shooting down the German V-1 Buzz Bombs with American-built radar while the radar long-range trackers tried to ferret out the location of the V-1's launching platforms from the line of flight which appeared on the radar scopes.¹⁹

Radar which had been used as a weapon of defense in the Battle of Britain quickly forged on to become a weapon of offense in the war against Germany and Japan.²⁰ The 8th Air Force found out that the weather over Europe during the winter months can be pretty bad. Despite a shortage of the new 3 centimeter wavelength radar, the 8th Air Force devised a scheme which enabled planes containing this radar equipment to lead a complete wing of 540 bombers over Germany on its first practice run on November 3, 1943. The radar equipped planes, called Pathfinders, were each able to lead sixty or more bombers to the target and all could then drop their bomb load

¹⁵ U. S. Joint Board, p. 12.

¹⁶ I. B. Holley, Jr., *Ideas and Weapons* (New Haven: Yale University Press, 1953), p. 5.

¹⁷ James Stokley, *Electrons in Action* (New York: Whittlesey House, 1946), p. 195.

¹⁸ Henney, p. xx.

¹⁹ U. S. Joint Board, p. 19.

²⁰ Louis N. Ridenour, "Radar in War and Peace," *Electrical Engineering*, LXV (May, 1946), p. 204.

on signal from the Pathfinder bombardier. Until the necessary spare radar sets could be manufactured, these same few Pathfinder planes led the whole 8th Air Force over Germany through the winter of 1943-44. Radar had become an important part of strategic air force operations.²¹

The bombers were better supplied with radar equipment by the time the invasion of France began. This time the target was the shoreline of Normandy and its installations just beyond. The job to be done was important and difficult; for twenty-five minutes beginning at H-hour-minus-thirty-minutes a rolling barrage of bombs was to be planted just ahead of the landing craft of the assault forces. The 8th Air Force hoped that the weather would be perfect to insure good visibility for this ticklish task on D-day, but the Channel was blanketed by thick clouds on the morning of June 6, 1944. Bombing by radar was the only answer, and not one Allied man was killed or hurt by the bombs dropped on that memorable day by the 8th Air Force.²²

Radar played just as important a part for the Navy. The resolution of the new microwave radar allowed our largest battleships to come closer to strange shores in the dead of night than they ever have dared to do before. In the same way transports and cargo ships were permitted to unload closer to the beach, lessening the danger to their small craft and saving immensely on unloading time. In the black of night or thickest of fog, our warships could pinpoint a target. The versatility of size of the different models developed by the Radiation Laboratory also allowed complete systems to be installed on the Navy's small PT boats. Radar played its first important role for the Navy during the early days of convoy service. Because of strict radio silence and blackout regulations, the convoy commander with his radar search indicators on the bridge could tell immediately if any of the ships strayed out of line or were in danger of collision with their nearest convoy member. Escort destroyers to the rear and in front of each convoy were also radar equipped and could speed to the rescue of any such ship in trouble. In the closing months of the war U-boats were being sunk at the rate of five or six a week by means of radar ferreting and it is conceded that the collapse of Germany was due in large part to the continuous flow of supplies across the Atlantic. That this flow was continuous was largely due to the part that radar played.²³

The superiority of the Allied radar proved itself when the German pocket battleship *Scharnhorst* was sunk in the North Sea in December, 1943. The German battleship had been detected by several British destroyers on their search radar at the distance of eighteen miles. These British destroyers continued to watch the German ship while carefully keeping behind the horizon until the arrival of reinforcements. The British battleship *H. M. S. Duke of*

²¹ U. S. Joint Board, p. 32.

²² Stokley, p. 307.

²³ Rider, p. 49.

York was in the vicinity and approaching at full speed. The *Duke of York* detected the *Scharnhorst* at twenty-three miles but closed in to 12,000 yards before firing her first salvo. It is said that the Germans were completely unaware of the presence of the *Duke of York* until the first salvo poured in on them. Similar incidents were repeated in engagements between the U. S. and Japanese Navies all during the war in the Pacific. Radar had removed the phrase, "the enemy retreated under cover of darkness," from the naval communiques, for day or night makes no difference to the searching beams of radar pulses.²⁴

One major setback occurred during the war when the Radiation Laboratory attempted to produce radar wavelengths smaller than the commonly used 3 centimeter wavelengths. Because the development of the 3 centimeter radar had produced such vast improvements over the original 10 centimeter radar, it was logical to believe that even smaller wavelengths would produce even further improvements. The new wavelength was more or less arbitrarily picked to be 1.25 centimeters. After two years of effort on the part of engineers and physicists, as well as the expenditure of millions of dollars, such a radar system was produced, installed and tested. The new radar produced a very narrow searchlight beam as expected, but the range of visibility was disappointingly small. It could not reach farther than fifteen miles, whereas the 3 centimeter radar had been reaching seventy-five to one hundred miles. A flurry of research disclosed that the water vapor in the air was strongly absorbing the 1.25 centimeter microwaves. At this time, the United States was primarily engaged in the Pacific war and water vapor in this area is high. Because the water vapor could not be eliminated, the radar equipment was useless and had to be discarded. This accidental choice of wavelength was at the time a major military setback, but fortunately we were able to go back to the 3 centimeter radar which was still very successful.²⁵

After the war, the Signal Corps continued to investigate new uses for radar and produced an interesting experiment during January of 1946. One of the first pre-war radar sets was carefully modified to generate an extra wide pulse with high power output. In addition, its large antenna was fixed to point directly at the moon during the period of moonrise or moonset. With the set's indicators also modified to show distances up to 300,000 miles, the special moon radar set was triggered on January 22, 1946, while the moon was rising over the horizon. The echo pulse returned and was detected right on schedule—a little over two and a half seconds later. Comparison of the strength of this returned echo from a distance of 238,000 miles with accompanying noise strength indicated that this particular set would be able to receive lunar

²⁴ *Ibid.*, p. 50.

²⁵ George A. Baitzell, *Science in Progress* (New Haven: Yale University Press, 1953), p. 216.

echoes up to one million miles away. There is no practical limit (except target size) to the distance at which radar can be effective, providing there is a straight line between the antenna and the object at which the beam is directed.²⁶

During the war the Radiation Laboratory perfected many items of radar equipment which are more in use today than they were during the war. One of its greatest accomplishments was the perfection of a long-range navigation system called *Loran*. This navigation system now covers every part of the globe and allows exact locations to be obtained by either aircraft or ships in any kind of weather. The accuracy of these Loran fixes is just as good as a celestial fix and yet they are much easier to take and to interpret. During the war this system was used to guide long range bombers to their targets over Japan and Germany.²⁷

Another useful item, which had been designed at Radiation Laboratory, is the Ground Control Approach radar system. This equipment consists of a complete combination of 10 and 3 centimeter radar sets mounted in a large trailer and usually situated near airfield runways. With a few highly trained technicians operating the equipment, the set is used to guide lost aircraft to a safe landing in extremely low-visibility weather. Although this type of set was not produced sufficiently to be common before the end of the war, many Allied pilots were found floundering in the "soup" and guided back safely to the emergency fields which had GCA. This type of set is advantageous because no radar equipment is needed in the plane. Any aircraft with the normal communications equipment that is used to talk to the control tower can be vectored safely to the runway by GCA, because the technicians interpret the radar picture and then "talk the plane down" to the right spot. The Civil Aeronautics Authority operates many of these sets at principal airfields across the United States.²⁸

Without question, radar did a remarkable job during the war and was a very important contribution to Allied success. Today high powered radar still serves the same purpose in protecting the United States, Canada and most of the NATO countries from a surprise enemy air attack. Radar is used more on ships today than on any other mode of transportation for faster, safer travel in strange waters or during poor visibility. Radar is needed on the American highways today and perhaps more and better ways of utilizing the radar speed indicators will be found. The radar altimeter is used on nearly all aircraft for height determination. It is evident that radar has a future, in addition to GCA and Loran, in purely peacetime applications.

²⁶ J. Mofenson, "Radar Echoes from the Moon," *Electronics*, XIX (April, 1946), pp. 94-96.

²⁷ Rider, p. 65.

²⁸ *Ibid.*, pp. 60-61.

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A Girlfriend

JAMES RENTFRO
Rhetoric 101, Theme 8

A GIRLFRIEND IS A STRANGE CREATURE. SHE IS SOMETIMES hard to find, but, when found, is harder to get rid of. She is either in your hair or on your mind. When you are the farthest apart, you are the closest. She is expensive, sweet, jealous, witty, and right. She knows how to shift gears, write themes, kiss, kick, cuddle, and console. A girlfriend has a sense of humor, tremendous appetite, lovely smile, large allowance, and an ability to understand. She likes to dance, dress up, eat pizza, neck, and go to drive-in movies. She hates your teasing, drinking, other girlfriends, bachelor friends, and lack of etiquette. She is never wrong, satisfied, on time, unfaithful, or forgotten. A girlfriend means laughter and tears, heartbreak and joy. A girlfriend is a song, a full moon, a hamburger at a drive-in. She is wisdom with a pretty face, and virginity with a shapely body. A girlfriend, a real girlfriend, is a wonderful thing.

Portrait

MAX FLANDORFER
Rhetoric 100, Theme 1

IT'S BIG. THE FIRST THING ANYONE NOTICES IS ITS SIZE. It's huge—huge and sprawling—tangled over the landscape like a broken cobweb. It is a mass of steel, stone and asphalt mountains made by man, eroded by canyons of streets and sidewalks, and undermined by subways. It stands a being so complicated and confused it doesn't know its own self,

New York is a city sufficient unto itself, asking for and giving nothing. It is as cold as the ice in the streets, and as dirty. Fighting the good and the bad alike, it sits waiting to pounce on an unwary person like a vulture—savage and cruel as any bird of prey ever was—asking and giving no quarter.

The people are the same—the rich, the poor, and the dreamer—all alike. There is Park Avenue with its ultra-smart shops and people living an unreal, circus-like life with big cars, French poodles, tuxedos, and painted suites, trying to find something which somehow seems to elude them. They are running madly in a chrome-plated dream of frustration.

There is the bowery with its stinking, filthy gutters, tenements, flop-houses, and cheap bars. Here are the winos sitting under the thunder of the “el”—glassy-eyed, drunk—lost in their dreams. The only thing the city lets them have is a dream—a dream rising from the cheap juke-box music, of the cigarette butt in the gutter and the prostitute on the corner. The lifeless, plodding existence of the people here is supported by the dreams and promises of their enemy and only friend—the city.

It is a big, beautiful woman, beautiful and cheap, garishly painted in neon lights with a dress of paint and billboards. Her heart is as big as her people and as hard as her pavement. She lures the farm boys and country girls with promises of love and money, promising, seldom fulfilling. She shocks and terrifies the stranger with her callous indifference to death—and life—and her total unconcern for the misfortune of others.

New York is a personality as full of hate as she is of love, sharing and doling each out equally and indifferently. It is seen in the couple trying to escape for a moment from her grip to the park or Coney Island, escaping in the dreamland of the movies or the bright lights of Broadway; or the people at the Copa Cabana, the Latin Quarter, or Carnegie Hall. They all live, love, and hate in the same futile way.

On the surface she is gay, carefree, and full of music—trying—trying hard to be happy. But the brassy, blaring gaiety is strained with an undertone of heartbreak and tears. You must listen hard and know what you are listening for. The deep, sad cello-tone of weariness in the factory whistles, the high, desperate violin shriek of the ambulance siren—it's there—listen!

She is rotten, rotten to the core. She'll kick you and, when you fall, spit on you. She waits for the stumbler, hoping he will fall, waiting with a cavern-

ous mouth and a stomach with no bottom. She is bad; she is cheap; and she won't give anyone an even break. She hates everyone of her crawling, squirming parasites, and they know it.

Give her your heart—she will take it, twist it, bend it, break it, throw it in your face, laugh at you, and never ask forgiveness. She is everything God ever made wrong in this world, but she is my city. New York, big, bright, savage, and beautiful—I love her—every stinking, dirty little street.

Ways to Combat Teachers

CAROL CROSBY

Rhetoric 101, Theme 5

TEACHERS ARE UNUSUAL CREATURES, AND EACH ONE must be handled individually. Attempting to classify them under one heading is futile, but the student cannot obtain the best results in frustrating them without recognizing the different types and the best means of combatting each.

A type of teacher that is very well known on campus is the "Jolly Good Fellow" who tries to win the class's attention and good will with a hearty laugh or a slap on the back. One wonders at the crafty gleam in his eye; his words do not ring quite true. In thwarting this type of teacher, the student should maintain an attitude of aloofness. Refusing to join in class discussion and staring at him coldly are excellent methods of halting his obvious insincerity.

All of the students on campus know the austere instructor, the man of distinction. Sleeping through this instructor's classes, the students find that they will not be interrupted, for this mighty man cannot be bothered unless the offender begins to snore.

The teacher that gestures and shouts is a member of a third class on campus. The student finds nothing so annoying as a teacher who states with great passion and feeling, "There are three ways to solve a quadratic equation." Again, the cold stare and a glance filled with contempt are the best courses to follow.

The opposite of the instructor mentioned above is the nervous, soft-spoken, mixed-up kind. With insignificant words and phrases and in scrambled sentences he explains a problem and then asks if everything is clear. He has developed the habit of dropping chalk, and, easily confused, he goes off on tangents and falls off the platform at least once each period. The class can catch up on the latest gossip, because the teacher's voice becomes lower and lower as the voice of the class gains in volume.

After the college student classifies his teachers he can decide upon the best ways of frustrating them. Using various methods, he can become one of the great crowd of students engaged in subversive, anti-teacher activities.

Mink Raising

PATRICK SHEEHAN

Rhetoric 101, Theme 3

MINK RAISING, AS AN OCCUPATION, HAS FINALLY COME into its own in the United States. Each year thousands of pelts are used by American furriers to make mink coats. Each pelt used in a coat represents one year of preparation. This preparation includes breeding and separating of the mink, and also skinning, fleshing, and pelting.

Breeding is done during the months of January and February. The established mink rancher usually saves a number of females and males from the previous year to use as breeders. Each male is bred to ten females. Mink of different colors are often mixed in order to produce a kit which contains the colors of both parents. By the middle of February the breeding process has been completed, leaving the mink rancher with nothing to do for the rest of the month but feed, water, and clean the mink.

Late in March the kits begin to arrive. Litters range from one to as many as ten kits. There may be any number of males or females in a litter. After birth the kits are left with their mother for about two months. They grow rapidly during this time, often becoming as large as their mother.

May and June are the months of separation. Each kit is put into a separate pen. If this were not done, the pens would be so crowded that the mink would smother one another.

The male mink grows steadily larger during the months of July, August, September, and October, reaching maturity early in November. It takes about nine months for the male to develop fully. The female has reached maturity by the end of five months, usually maturing at only half the size of the male. For this reason the male pelt is worth twice as much money on the market as the female pelt.

To the mink rancher November is the most profitable month of the year, and also the busiest. During this month the mink must be killed, skinned, fleshed, and pelted. A gas chamber is used to kill them. After being gassed, the mink are cut open and the flesh is scraped out of them, leaving only the skinned pelt. After the pelts have dried, they become quite hard. The pelting process is then used to soften the furs. Now they are ready to be sold. A sample of the furs is sent to New York, where a large auction is held, and the furs are sold to the highest bidder.

If it has been a good year and fur prices are high, the pelts will bring a good price, and the mink rancher will show a sizable profit, but this is not always the case. Disease may strike the mink, or prices may drop, leaving the rancher with hardly enough money to cover the cost of raising the mink.

Raising mink is not the easiest way to make a living, but, if a man enjoys working outside and likes to gamble a little on the future, it has its compensations.

Three Worlds

ROBERT CAMY

Rhetoric 102, Assignment 21

AT NOON THE SUN WAS VERY HOT, AND IN THE WATCH-tower on the top of the high cement wall a fat guard was sitting in a tilted chair, holding a rifle across his lap and staring somnolently off into space. From under the stiff cap of his uniform streams of sweat were coursing slowly down his red face and dripping on his sun-tan shirt, which had turned dark all over with wetness. Now and then his eyes closed and his head fell forward, and then he would start, spasmodically clutch the heavy rifle, and snap his head up, forcing his eyes to open again in the same glazed stare.

Below him in the street outside the wall, an unbroken stream of noontime traffic was passing. On the sidewalk next to the wall two girls who wore brief shorts and thin sweaters were talking along rapidly, talking and laughing, their teeth gleaming in their tanned faces. The taller of the two, who was holding her companion's arm, and whose legs were very white in the sun, walked rather stiffly. The other girl's legs were a deep brown, and she walked with such natural grace that she might have been dancing along the street beside the blank, gray wall. The girls turned their heads to look intently into each other's faces as an automobile containing two young men swerved in to the curb; they remained totally absorbed in their conversation while it rolled slowly along beside them. Shortly, the car turned back into the traffic. The girls did not look at it as it moved on down the street. A moment later an open red convertible with flashing bits of chromium on it swooped in to the curb beside them. The driver had a deeply tanned face and gray temples, and on the ledge above the seat beside him were two tennis racquets and a woman's hat. He spoke briefly to the girls, and they turned and went out and paused on the curb. He leaned across the seat and threw open the door, and the girls hesitated for a moment and got in beside him, laughing merrily at something he had said. The convertible swung smoothly back into the traffic lane and sped away, its twin exhaust pipes emitting three or four faintly blue puffs.

Up in the tower the guard started, opened his eyes, and grabbed his rifle as it was sliding off his lap. He shook his head violently several times. Taking a handkerchief from his hip pocket, he swabbed his wet face and the roll

of fat on the back of his neck. He paused to balance the rifle across his thighs, then he lifted his cap, swiped the handkerchief across his completely bald head, and returned the soggy cloth to his pocket. Squirming in his chair, he pushed his cap to the back of his head, renewed his grip on the rifle, and settled back. His eyes began to grow dull again as he stared out over the small prison-yard.

Before his blank gaze, on the other side of the yard, there was only the side of a long building, with shades drawn over its windows to keep out the sun. This building and the three cement walls enclosed the tiny yard in an oven-like rectangle where the heat of the sun was trapped as it reflected upward from the bare ground. In all of the yard there was no shade except a few square inches in one corner, where three sparrows were pecking listlessly in the unpromising dust. They fluttered lazily upward and clung to the top of the wall, chattering momentarily, as a man in a blue striped denim uniform, who was carrying a bucket which seemed to be very heavy, came out slowly and awkwardly through the door of the long building into the yard. He set the bucket down on the ground near the door and began a close examination of the palm of the hand in which he had been carrying it. With the fingers of the other hand, he gently massaged the palm, wagging his head in a somewhat comical display of concern and glancing around the yard and up at the tower as though he were in search of a sympathetic onlooker. He turned completely around, looking in the four corners of the yard and up and down the building and the walls, all the while shaking the fingers of his right hand as if they were painful. Finally, he proceeded rather ceremoniously to empty the bucket, stooping over it and tipping it gently, and slowly trickling the contents on the ground, as though it were important that the bucket should not be carelessly dumped. When it was empty he stood up. He picked up the bucket and kicked at the ground a couple of times. Then he turned, swinging the bucket, and returned briskly into the building. As soon as the door had closed behind him the three sparrows darted swiftly down from the top of the wall across the yard and began to investigate the edges of the wet spot where the bucket had been emptied. They were beginning to peck tentatively at the damp earth when a clattering noise alarmed them, and they rose in desperate haste and with two or three flirts of their wings disappeared over the wall.

High up in the tower the guard started and heaved himself to his feet so suddenly that his cap fell off and rolled into a corner. He was panting, and he had to extend one leg stiffly behind him in order to bend over far enough to pick up his rifle. That done, he retrieved his cap and set it squarely and firmly on his bald head. He shook himself and plucked at his wet shirt to pull it away from his body. Then, with his rifle tucked under one arm, he started to turn around and around, a step or two in each direction, in his small square space.

Happiness Versus Unhappiness: A Review of *Brave New World*

ELMER E. ANDERSON

Rhetoric 101, Theme 10

BRAVE NEW WORLD BY ALDOUS HUXLEY IS A SATIRICAL criticism of any Utopia created on purely scientific premises. Moreover, it is a criticism of Western society in 1932, as 1984 by George Orwell is a criticism of the same society in the closing months of World War II; but it is quite applicable to society today. *Brave New World* deals with the "right to be unhappy" and with the revolt of the Individual against the Mass which attempts to force on him a mechanical well-being.

Brave New World opens with a description of a eugenic, eupeptic, eurythmic, and euthanasic world that functions perfectly, and it gives many references to the work of modern scientists (particularly to Pavlov's work on dogs). The ideal of this world is the absolute happiness of all and the absolute stability of society; the ideal has been attained after much regrettable violence and many painful experiments. With ingenuity Aldous Huxley, mixing extensive knowledge of the scientific trends of the 1930's with a witty lightness of touch, conducts the reader over this well-run world-establishment. The members of this society, from the maturing of their embryos in bottles to their extinction in a state of pleasurable stupor, are never—well, hardly ever—discontented with themselves or envious of others.

The Utopia which Aldous Huxley envisages is a world state with the motto, "Community, Identity, Stability." It dates from the introduction of the first T-model of Henry Ford, who has become the symbol of this standardized mechanical civilization. Complete sexual freedom is the rule, and any tendency to prefer one person to another is viewed with mistrust as subversive of the central idea of the World State: "Everyone belongs to everyone else."

In this "brave new world" youth and vigor are sustained by drugs. Old age has been abolished, and death is sudden and painless. The pleasures of life, apart from the main one of sex, are elaborately mechanized games and synthetic music, which includes harmonies of scent, color, and touch, as well as sound. The taste for reading and nature is obliterated by suggestion ("conditioning" it is called) in early childhood. "The secret of happiness and virtue," says one of the characters, "is liking what you've got to do. All conditioning aims at that, making people like their inescapable social destiny."

There are still, here and there in the world, reservations where savages not worth converting into civilized beings live in the old way. Cleverly Huxley introduces his main character, a noble savage named John, who, by a misadventure, was born of a Utopian mother on an American Indian reservation in New Mexico. John had become self-educated on an ancient volume of Shakespeare, whose picturesque language and whose Elizabethan description of men and women had colored all his thinking.

John goes to London—into the “brave new world.” His first enthusiasm quickly gives way to bewilderment and to disgust. He wants God, but he is told that God is not compatible with machinery and medicine and universal happiness. He wants instincts, but he is told that instincts are passé: one believes now only what one has been conditioned to believe. He wants solitude, but he is told that people are never alone. He wants the right to practice self-control, but there is only self-indulgence up to the limits allowed by hygiene and economics. He wants the noble, the fine, and the heroic; but he is told that these are the symptoms of political inefficiency. He wants to live dangerously, and he is told to try a V. P. S.—a violent passion surrogate by which he can experience all “the tonic effects of murdering Desdemona and being murdered by Othello, without any of the inconveniences.” John sums up the whole situation when he says, “I don’t want comfort. I want God, I want poetry, I want real danger, I want freedom, I want goodness. I want sin.” And Mustapha Mond, the Controller of Western Europe, remarks, “In fact, you’re claiming the right to be unhappy.” John defiantly admits the charge.

Besides the main character of John the Savage, there are other dominant characters. Lenina, the pretty and attractive heroine of the story, cannot understand the ways of the Savage; an amusing incident ensues when she undresses in front of him. Bernard, who has alcohol in his surrogate, and Helmholtz are two characters with whom, despite all scientific precaution, something had gone wrong; they were individuals and they met their inevitable fate—banishment to a remote island. Two other noteworthy characters are the Director of Hatcheries, who resigns his position in humiliation after learning that he is the father of the Savage, and Linda, the Utopian mother of the Savage.

Brilliance and wit animate *Brave New World*. The use of Huxley’s knowledge of scientific trends has already been mentioned. (As a matter of fact, if an attack of keratitis when he was a youth had not resulted in almost complete blindness, Aldous Huxley would have pursued a course of study leading to a degree in medicine. As it was, he had to give up scientific studies, which required keen eyesight, and turn to literature and history. All his life he has struggled against blindness, and only since a few years ago has he enjoyed anything approaching normal vision. He has, nevertheless, attained in the world of letters a reputation equal to that in science held by his grand-

father, Thomas H. Huxley). His wit is quite noticeable in the phrases where he replaces the word *God* with the word *Ford*, as for example:

"A. F." means in the year of Our Ford.

"Ford's in his flivver. All's well with the world."

"Cleanliness is next to Fordliness."

"Ford helps those who help themselves."

There is also his subtle humor, as for example: "Going to the Feelies this evening, Henry?" inquires the Assistant Predestinator. "I hear the new one at the Alhambra is first-rate. There's a love scene on a bearskin rug; they says it's marvellous. Every hair of the bear reproduced. The most amazing tactual effects."

Compare:

Orgy-porgy, Ford and fun,
Kiss the girls and make them One.
Boys at one with girls at peace;
Orgy-porgy gives release.

with:

Georgie-Porgy, pudding and pie,
Kiss the girls and made them cry;
When the girls come out to play,
Georgie-Porgy runs away. (A Nursery Rhyme)

Brave New World may be summed up by stating that it stages a fundamental debate between scientific utopianism and humanistic imperfection, of which latter there are many concrete forms from the lowest idolatry to the most transcendental religions and philosophies. Aldous Huxley sees that a scientific "best" might be reached from which all change might be scientifically worse. The scientific "best" would become a dogma as unscrupulously maintained, as craftily protected, and as unflinchingly upheld by punishment of heretics as any belief of an organized religion in the past. As long as the "brave new world" is not an achieved fact, it is easy to envisage all human virtues—love, devotion, heroism, chastity, self-denial—engaged in its achievement; but it is not easy to look further and ask what is to become of those virtues when there are no oppositions for them to overcome, no crises that call for their exercise, and no will to exercise them.

It is curious indeed, in these days that call themselves enlightened, to observe the old controversies over original sin and justification by works becoming, in new phraseology, a tense modern issue. What is man? What is the soul? For what purpose are we here? What is the highest good? These historic questions—let there be no mistake—are fundamental questions still. If they cannot be answered, the debate cannot be concluded. Aldous Huxley gives them up in despair. Read *Brave New World* and try to conclude the debate, if you can.

Sugar and Spice

CAROLE BRANDT

Rhetoric 101, Theme 4

SPARKLING BROWN EYES, SHORT BLOND HAIR, AND cheeks that have been kissed by an angel—that's my seven-year-old sister, Linda.

Linda takes full advantage of the fact that she lives on the corner of one of the busiest streets in town. She rides her tricycle up and down the sidewalk, looking for people to talk to. One can hear her friendly "Hi" for a block away. She walks with the mailman, plays football with the little boys on their way to school, and shouts out the family secrets to anyone who happens to be passing by.

Linda loves animals. She carries Sam, a mongrel cat, around by the tail and plays nursemaid to a raccoon, Honey. She also delights in sweeping bird feathers—the feathers belonging to the birds Sam devours—off the porch.

Linda's first trip to the dentist was an experience that none of the family will ever forget. She and I had joint appointments, so on the assigned day we ventured into the sterile hands of the dentist. Linda was planning to go to the Saturday afternoon Roy Roger movie, so she climbed into the dental chair first. I went into the waiting room because I had some conception of the ordeal the unsuspecting dentist was about to experience.

Forty-five minutes later a whipped and beaten man staggered from his office. He had been unable to pry open the jaws of this thirty-five pound menace. Not only was he unsuccessful at getting her to open her mouth, but she had also offered him the quarter that she was to spend for the movies if he would forget the whole thing. Linda didn't open her mouth; Linda didn't attend the movie.

Then there was the day she started to school. She came home well-educated after four hours of experience in the academic world. When she was questioned as to how she was going to like school, her comment was, "It seemed quite juvenile. I hope the teacher realizes that I was bored stiff today."

Until Linda was old enough to go to church my father would always babysit with her on Sunday mornings while the rest of the family went to church. On one particular Sunday morning my father told Linda that he would give her a quarter if she would go upstairs and clean up her playroom. She considered his offer for a minute or so, then looked up at him and said, "I believe cleaning is Mother's job, so why don't you give her the quarter when she comes home, and maybe she will straighten it up."

Last summer Linda won a stuffed dog at the fair. This animal was about the most wonderful thing that she had ever possessed. She carried it around with her night and day and would never let it out of her sight. On the day

I left to come to school she came downstairs with her dog behind her back and then thrust it into my hands. Her brown eyes were filled with tears, but she said she wanted me to have the stuffed animal.

Sparkling brown eyes, short blonde hair, and cheeks that have been kissed by an angel—that's my seven year old sister, Linda.

Maturity Has Its Drawbacks

QUENTRED WUTZKE

Rhetoric 101, Theme 10

THEY WERE LONG SUMMERS. THE CREEK MOVED SLUGGISHLY past my feet when, as a child, I sat on its bank in the tall weeds and cast leaves upon it to watch them make their way slowly down to the bend, where finally they would reach the rapids and be swept under by the current, or left high and dry on a stone. They were long winters. The old study hall clock in our grade school had an eternity between every tick-tock. There were *so many years*—so many years to pass until I could myself be wearing ladies' dresses ordered from the Sears Roebuck catalog, and high heels and nylons and lipstick—until I could cut off my braids—until I could be an adult.

Adults don't have to go to school, you know. They don't have to go to bed at bedtime, either, and they do such glamorous things as falling in love and getting married and having careers. Adults have all the advantages, it's easy to see. Kids can't vote or attend any of those mysterious club meetings, and movies that are labeled "for adults only." They have all the excitement while kids have all the drab preliminaries—oh, to be grown up!

Last summer was an extremely short one. One week of it was spent at the Illinois 4-H State Junior Leadership Conference, where we discussed maturity and its absolute necessity for leadership. One of the outstanding points made at the conference was this: "A leader is one who wants to do what he knows he ought to do, whether he wants to do it or not." We began to realize that leadership is a product of maturity—sociological maturity—and that this maturity has more drawbacks than physical maturity (when men hate their razors and women their foundations). This maturity brings with it not only the privileges of an adult, but the duties of an adult, and, with a mature state of mind, the obligation to carry out these duties willingly.

I now see myself as one of my cast leaves suddenly arriving at the bend of the creek and being taken up in the rapids from which there is no turning back. The rapids are tiring. The never-ending routine of lipstick, pincurls and pressing date dresses is itself as nothing compared to the never-ending routine of work—of becoming in every way a useful adult.

Pride and Prejudice

MICHAEL HAYNES
Rhetoric 102, Theme 6

IN THESE DAYS OF ANTI-SEGREGATION LAWS AND THE United Nations, much to-do has been made about prejudice. It seems that everyone has much to say on the subject; consequently, certain misconceptions and misconstructions and confusions have arisen concerning it. Let us, therefore, return once again to the lair of our hometown philosopher, whose oracular utterings have been settling the world's problems to the satisfaction of the local populace for many decades. Ah, there he sits, on the ancient, rickety rocking chair in front of his general store. Come, let's go up and listen.

"... free country, Harv, and by gum we got a right to be prejudiced if we want to. These birds allus screamin' about prejudice—how wrong it is and how we ought to stomp it out. 'The greatest blight of our civilization,' they call it. Pfah! Why, son, they're a bunch of danged fools. They go around crusadin' against prejudice of all kinds without realizin' that everybody that's got opinion of any kind about anything is prejudiced to an extent. Look. Just suppose I hate broccoli—can't stand the stuff and won't allow it on my table. Now, to my way of thinking, that is prejudice just as unreasonable as if I hated Jews. So, y'see, these anti-prejudice nuts are makin' war on the entire human race. Why, they're prejudiced themselves worse than anybody—they're prejudiced against prejudice.

"Some of 'em—a very few of 'em—have got sense enough to say that it's racial or some other particular prejudice that they're against. Now, I say that's a decided improvement, but I think they're going at the thing all wrong. I personally feel some racial prejudice, but I'm certain it ain't as strong in me as it was in my father—nor will it be as strong in my children as it is in me. Y'see, this elimination of unreasonable prejudice (and now I'm talkin' racial prejudice) has got to be a kind of gradual thing. Can't be done at one fell swoop (whatever the heck that means), as these nuts want to do. If they had enough sense to leave things be, they'd find that folks would just forget prejudice in a couple of generations.

"But the thing that gets me, Harv, is these scatter-brains hollerin' about prejudice being un-American—and then trying to shove down our throats an ideal we don't believe in. Makes me kind of mad when somebody tries to tell me what to think. They can't do that in the good old U. S. of A. This is the best danged country on the face of the earth, and when some bunch of goofs tries to pull off something that the old boys who started us up wouldn't have considered quite cricket, it's up to us to stop 'em. Now, basically, I agree that it's silly to dislike a man because he's got a little deeper suntan than the rest of us, but, by gum, Harv, I won't . . ."

Once more our hometown oracle has succeeded in throwing his light on a hitherto shadowed subject. Let us be thankful for his existence. Were he not present as a stabilizing influence of sorts, our civilization long ago might have followed some fanatic down the road to destruction.

Memories

MARY ANN HOOD
Rhetoric 101, Theme 3

IT WAS AN ORDINARY DAY IN DECEMBER OF 1944 IN THE wilderness of central Arkansas. The weather was typical of most Decembers in this part of the South. The air was cold and penetrating, and the slow steady drizzle of the rain seemed never to stop.

I got out of bed at the usual time, five o'clock, and dressed quickly. The reason for my hurry wasn't that I was in any particular rush, but the only place where we had heat was in the kitchen by the cook stove, and I'm not very fond of the cold. I took off my pajamas, jumped into my long underwear, put on a flannel long-sleeved shirt and stepped into a pair of overalls. I sat on the edge of my bed and pulled on my woolen knee socks, folding in my underwear legs neatly. I wrapped boot rags around my feet and ankles and slipped my boots on.

In the kitchen I got a couple of dippers of hot water from the stove reservoir and a dipper of cold water from the bucket on the bench. I washed my face and combed my hair. It seems almost like a dream now when I visualize the bench under the window near the door with its two buckets of water—one with well water for drinking and cooking, and the other with soft water for washing. At the end nearer the door sat the wash pan. There was a mirror on the wall between the window jambs. We kept a slop bucket under the bench for dirty water which was carried out at least twice a day.

I put on my jacket and woolen stocking cap and went out into the dreary weather. The cold mist hit my face and made me shiver. I got an armload of wood from the woodpile, took it in the house, and dropped it into the woodbox behind the stove. I took the milk bucket from its hook behind the stove and went out to the barn to milk the goats. We had five goats—two nanny goats, two kids, and one billy goat. On days like this I hated to make them get up from the warm straw bed. They gave me an almost human look that seemed to say, "Oh, misery! It's you again?" They pulled themselves up and stood patiently while I milked. I got about a quart and a half from both of them. After milking I fed the goats and horses, and scattered feed inside the barn door for the chickens. Most animals stay in when the weather is bad. The goats are especially particular. They don't like to get their feet wet. They

are very careful about their food also. Unlike cows, who sometimes pull up a whole plant and eat it, goats nibble only the clean tips of the grass, and they eat only the choice leaves from the bushes and trees.

Mom had breakfast ready when I came in from my morning chores. I ate a big breakfast every day. On this particular day I had a large dish of oatmeal topped with sugar and butter and swimming in warm goat's milk. Then I had two eggs, bacon, and a couple of pieces of homemade bread. With this I drank a cup of coffee.

After breakfast, I was ready to run my traps. I put on my jacket and cap, took a handful of bullets from a drawer in the kitchen cabinet, and picked up my twenty-two rifle. The walk across the pasture to the woods was short but the ground was very soft from the frequent rains. I was always glad to get into the woods where the ground was hard from the packed leaves and sticks. I loved the woods. Even on a day like this, when the trees, stripped of their leaves, stood forlorn and desolate against the gray sky, I felt good as I walked along.

I had ten steel traps spaced out in almost every section of the woods. They were in logs, under leaves, in hollow trees, or near holes in the ground. My average catch was about three skunks and one or two opossums. On this particular day I made a very good haul. I had five skunks in my traps. I shot the animals, took them home, skinned them, and stretched the skins on boards that I had cut out and shaped especially for that purpose. The skins stayed on the boards for a few days until they were dry. I took the furs to town about once a week.

It was noon before I finished with the skunks. I ate a hearty dinner of beef roast, potato dumplings, sauerkraut, and fresh homemade bread with a thick rosy crust. Mom baked three loaves of bread every other day. I'll never forget the smell of that freshly baked bread.

After dinner I went back to the woods, but this time I took my dad's twelve gauge shotgun because I was going duck hunting and a rifle would have been useless. A large portion of the woods was under water. The government had built a dam across a creek and backed the water up for irrigation and duck refuge purposes. Consequently there was an abundant supply of ducks. I walked along the water's edge as quietly as possible so that if there were any ducks feeding they wouldn't fly away until I was near enough to shoot. I spotted a few here and there but they saw me too soon and flew away. The rain had stopped, but the clouds hung on and it seemed to be getting colder. I was almost ready to go home when I heard a lot of noise. There were ducks feeding somewhere nearby. I walked slowly on and soon came to a cove where there were about fifty ducks. I bent over and sneaked cautiously forward through the brush, and, when I was about ten feet from where the ducks were, I pulled back the cock on the gun and jumped out with the gun in firing position. The ducks flew up in a noisy cloud; I fired, and two ducks

fell to the other side of the cove. I took my kill home proudly and cleaned them.

That night, after the evening chores and a good supper, I went to bed early. In the few minutes before falling asleep I thought of my gains of the day. Five skunk skins at sixty-five cents each made three dollars and twenty-five cents. The two nice fat ducks would taste good for dinner tomorrow and Sunday. This was real profit to me.

On "What Every Freshman Should Know"

JUDITH SENSIBAR
Rhetoric 101, Theme 1

IN HIS ESSAY "WHAT EVERY FRESHMAN SHOULD KNOW" Holmes states, in effect, that the student should feel free to criticize and to question the things he is told. He feels that college is the place where a person learns of new ideals, and that the student should seriously attempt to understand these diverse new viewpoints. "Entertain them the more seriously the more they differ from your own," he says. "You may return to your own, but if you do, it will be with greater tolerance and broader understanding."

Holmes, however, neglects one very important thing: in today's society one dare not do this. Perhaps when he wrote this, back in 1940, things were different, but what would happen if a person followed this pattern today? He would be branded a "communist" or a "communist sympathiser." This word "communism" has come to have a very different meaning from its original one. A communist was once a person who believed in communal living and communal ownership of all property and goods. Now it seems to be anyone who holds opinions different from one's own.

A perfect, if extreme, example of this took place one day in 1952 during the Republican convention. I saw, sitting a few seats down from me in the Hilton Hotel's Coffee Shop, a man wearing a Taft button. (I was working in the Eisenhower quarters to help keep myself busy—my heart was with Stevenson!) I walked up to him and said that as a young and as yet unknowledgeable girl, I would greatly appreciate it if he could explain to me why he supported Taft. He said he liked Taft's policies. Because I could not argue in such a wide field, I narrowed it down to, "What do you think of his supporting McCarthy?" He said someone had to clear the communists out of the Government. Looking puzzled, I pointed out that to the best of my knowledge, Senator McCarthy had managed to find hardly anyone who was even remotely

connected with a "communist cause." He then looked at me with a mixture of pity and horror and said, "Young lady, if you like communism so much, why don't you get out of here and go to Russia! That's where you belong. Why, if you were my daughter I'd . . . I don't know what I'd do. Communists like you should be put in jail!" And he walked out.

If I was considered a communist because I was seeking the reasons why people supported Taft and McCarthy, think of the poor student's plight when it gets out that he has read the *Communist Manifesto*, let alone seriously considered the theories it contains. And if a man loses his job because he once, twenty-five years ago, seriously considered communism, or even because a relative or friend of his once did, imagine what the chances are for today's inquisitive student. If he questions our ideology or contrasts it with more liberal ideologies, or if he tries to find out more about other economic systems, he is considered to have been somehow disloyal to the United States.

And not only must he avoid all contact with communists or communist writings, but he must also survey carefully any cause before backing it. The strangest organizations get mud slung at them today. I have frequently read letters to the editor in various newspapers and even a few editorials in the *Chicago Tribune* to the effect that the National Association for the Advancement of Colored People is a "communist front" organization. Why? Because it is against segregation and discrimination and so is the Communist Party. Even more farfetched was the statement issued by the Illinois chapter of the American Legion which said that the Girl Scouts of America was a communist "infiltrated" organization, a fact easily seen if one looked at some of the ideas in the manual: international understanding is necessary to world peace; the United Nations is promoting such understanding; therefore, we support the United Nations.

In the face of all this name-calling, the student is intimidated into not considering any ideas that have an aura of difference. In fact, he has gone to the other extreme: he is afraid to think, or, more particularly, to say anything for fear it will be considered radical and/or different. Perhaps if we all got together and revolted (peacefully, of course) against having our minds thus chained, it would do some good. I doubt it, however. It has long been an American tradition to distrust education, and the McCarthys and the Jeners could easily capitalize on this tradition and bind us in even heavier chains.

Rhet as Writ

My sister was two years younger than me and three rooms down the hall.

England wanted more land, so she sent Columbus out with three ships to see if he could find west by sailing east.

The Contributors

Elizabeth Cioban—Virden

Jack Cooper—St. Joseph

Roger Sheahen—Highland Park

Joseph Swinarski—Harrison Technical

Lynden Harbaugh—Lawrenceville

Jack H. Cutler—Bethany

Harry W. Richardson—Stuyvesant, New York City

James Rentfro—East Peoria

Max Flandorfer—U. S. Navy G. E. D.

Carol Crosby—Kankakee

Patrick Sheehan—Warren, Gurnee

Robert Camy—Joliet

Elmer H. Anderson—Barringer, Newark, N. J.

Carole Brandt—Lincoln

Quendred Wutzke—Sandwich

Michael Haynes—Mount Clemens, Michigan

Mary Ann Hood—Edwardsville

Judith Sensibar—Laboratory School, U. of Chicago